This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A distributed trading system for handling a plurality of order requests, each order request comprising parameters under which a participant will buy and/or sell a futures contract, the system comprising:

a messaging bus;

a validator coupled to the messaging bus and having a first interface for receiving order requests, wherein the validator implements processes for validating the order requests, and an interface generating a validated order message on the messaging bus related to validated orders;

a risk allocation value (RAV) component coupled to the messaging bus and having an interface for receiving validated order messages from the validator, wherein the RAV component implements processes for evaluating risk associated with an order should that order be completed and preventing completion on an order in response to the RAV component identifying an unacceptable position;

a match engine coupled to the messaging bus and having an interface for receiving validated acceptable order messages from the RAV component, wherein the match engine implements processes for matching orders based on order-specified criteria, wherein the match engine is configured specifically for a particular class of futures contracts and receives validated order messages only when they are related to the particular class of futures contracts, wherein the particular class of futures contracts comprise a contract cluster having a unique contract identification representative of a single tradable instrument, and wherein responsive to contract clusters being identified, requiring the match engine to consider two or more contracts simultaneously to determine matches; and

a persist component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the persist component implements processes for persistently storing information related to orders and trades; and

a resynchronization process,

wherein each of the validator, RAV component, match engine and persist component is operative to generate a halt message on the message bus in the event of a malfunction or failure, the halt message causes one or more or all of the validator, RAV component, match engine and persist

component of the system to halt, and the resynchronization process is operative to recover from such a system halt and reopen the distributed trading system for the buying and/or selling of futures contracts.

2. (Original) The system of claim 1 further comprising: a market data service component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the market data service component implements processes for generating market data related to orders and trades handled by the distributed trading system.

3. (Original) The system of claim 1 wherein the RAV component evaluates risk based on active orders, positions and margins for a particular customer placing the order.

4. (Original) The system of claim 1 wherein the messaging bus comprises a subscriber publisher messaging bus.

5-6. (Cancelled)

7. (Original) The system of claim 1 wherein the match engine publishes messages related to executed trades that are subscribed to by the persist component.

8. (Original) The system of claim 1 wherein the match engine publishes messages related to unmatched orders that are subscribed to by the persist component.

9. (Original) The system of claim 1 wherein the validator subscribes to messages related to market state, and the validator further comprises processes for using the market state to validate orders.

10. (Previously Presented) The system of claim 9 wherein the market state messages include information selected from the group consisting of: exchange active, contract active, markets open, user assigned to account, and high/low limits.

11. (Original) The system of claim 1 wherein the messages are self-describing.

12. (Original) The system of claim 1 wherein the messages comprise XML messages.

13. (Previously Presented) A method for implementing trades on an electronic exchange, the method comprising:

providing a messaging bus;

receiving an order request in a first component, wherein the order request specifies parameters under which a participant will buy and/or sell a futures contract;

validating the order request;

generating, by a processor, a validated order message on the messaging bus related to validated order request when the order request satisfies pre-specified validation criteria;

receiving the validated order message in a second component;

evaluating risk associated with the order represented in the validated order message;

generating an accepted order message on the messaging bus when the evaluated risk satisfies pre-specified risk criteria;

receiving the accepted order message in a third component;

matching orders based on order-specified criteria;

generating an unmatched order message on the messaging bus;

generating a trade message on the messaging bus corresponding to two or more matched orders;

receiving the messages related to unmatched orders and trades;

persistently storing information related to orders and trades;

proposing a settlement price for matched orders based on outside trade data;

publishing the proposed settlement price;

generating a halt message on the message bus by one or more of the first, second or third components in the event of a component failure or malfunction;

halting a selected one or more of the first, second and third components in response to the halt message; and

implementing a resynchronization process to recover from said halting of the selected one or more of the first, second and third components, wherein the futures contract includes contract clustering and each contract cluster includes two or more related contracts and each contract cluster is given a unique cluster identification, and wherein matching orders associated with one contract of a particular cluster identification includes simultaneous consideration of the two or more related contracts associated with the particular cluster identification.

14. (Previously presented) The method of claim 13 wherein the validator further comprises processes for reporting errors back to a client.

15. (Cancelled)

16. (Previously presented) A futures exchange including the distributed trading system of claim 1 and further comprising:

a trading floor operation producing a plurality of manually executed trades; and

mechanisms for recording executed trades from the trading floor.

17. (Original) The futures exchange of claim 16 where the mechanisms for recording executed trades utilize at least some of the components of the distributed trading system.

18. (Original) A market data product comprising market data produced by the market data service component of claim 2.

19. (Previously Presented) A distributed trading system for handling a plurality of order requests, each order request comprising parameters under which a participant will buy and/or sell a futures contract, the system comprising:

a messaging bus;

a validator coupled to the messaging bus and having a first interface for receiving order requests, wherein the validator implements processes for validating the order requests, and an interface generating a validated order message on the messaging bus related to validated orders;

a risk allocation value (RAV) component coupled to the messaging bus and having an interface for receiving validated order messages from the validator, wherein the RAV component implements processes for evaluating risk associated with an order should that order be completed;

a match engine coupled to the messaging bus and having an interface for receiving validated acceptable order messages from the RAV component, wherein the match engine implements processes for matching orders based on order-specified criteria, wherein the match engine is configured specifically for a particular class of futures contracts and receives validated order messages only when they are related to the particular class of futures contracts, and wherein the particular class of futures contracts comprise a contract cluster, and wherein responsive to contract clusters being identified, requiring the match engine to consider two or more contracts simultaneously to determine matches;

a persist component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the persist component implements processes for persistently storing information related to orders and trades;

a settlement component coupled to the persist component and having an interface for receiving orders matched by the match engine and an interface for receiving trade data, wherein the settlement component calculates a proposed settlement price and submits the proposed settlement price for publication; and

a resynchronization process,

wherein each of the validator, RAV component, match engine, persist component and settlement component is operative to generate a halt message on the message bus in the event of a malfunction or failure, the halt message causes one or more or all of the validator, RAV component, match engine, persist component and settlement component of the system to halt, and the resynchronization process is operative to recover from such a system halt and reopen the distributed trading system for the buying and/or selling of futures contracts.

20. (Previously presented) The system of claim 19, wherein the RAV component is further operative for implementing processes which prevent completion on an order in response to the RAV component identifying an unacceptable position.

21. (Previously presented) The system of claim 19 further comprising: a market data service component coupled to the messaging bus and having an interface for receiving messages related to orders and trades, wherein the market data service component implements processes for generating market data related to orders and trades handled by the distributed trading system.

22. (Previously presented) The system of claim 19 wherein the RAV component evaluates risk based on active orders, positions and margins for a particular customer placing the order.

23. (Previously presented) The system of claim 1 wherein the messaging bus comprises a subscriber publisher messaging bus.

24-25. (Cancelled)

26. (Previously presented) The distributed trading system of claim 1, further comprising: a monitoring system coupled to the messaging bus, for performing automatic testing to detect a failure or malfunction in the validator, RAV component, match engine and persist component and having an interface for generating a halt message to the messaging bus.

27. (Previously presented) The distributed trading system of claim 19, further comprising:

a monitoring system coupled to the messaging bus, for performing automatic testing to detect a failure or malfunction in the validator, RAV component, match engine, persist component and settlement component and having an interface for generating a halt message to the messaging bus.

28. (Previously presented) The method of claim 13, further comprising:

monitoring and performing automatic testing to detect a failure or malfunction in the first, second or third component, and upon detecting such a failure or malfunction, generating a halt message to the messaging bus.